1631

```
          RAW SEQUENCE LISTING           DATE: 09/18/2000
          PATENT APPLICATION:  US/09/428,674   TIME: 12:33:51

          Input Set : A:\8535-029.txt
          Output Set: N:\CRF3\09182000\I428674.raw

  4 <110> APPLICANT: Nehls, Michael
  5        Zambrowicz, Brian
  6        Sands, Arthur T.
  8 <120> TITLE OF INVENTION: NOVEL HUMAN POLYNUCLEOTIDES AND THE
  9        POLYPEPTIDES ENCODED THEREBY
 12 <130> FILE REFERENCE: 8535-0029-999
 14 <140> CURRENT APPLICATION NUMBER: US 09/428,674
 15 <141> CURRENT FILING DATE: 1999-10-27
 17 <150> PRIOR APPLICATION NUMBER: US 60/106,442
 18 <151> PRIOR FILING DATE: 1998-10-30
 20 <160> NUMBER OF SEQ ID NOS: 1008
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 40
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Primer
 32 <400> SEQUENCE: 1
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 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 24
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Artificial Sequence
 40 <220> FEATURE:
 41 <223> OTHER INFORMATION: Primer
 43 <400> SEQUENCE: 2
 44 gccatggctc cggtaggtcc agag                          24
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 19
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Primer
 54 <400> SEQUENCE: 3
 55 tggctaggcc ccaggatag                               19
 57 <210> SEQ ID NO: 4
 58 <211> LENGTH: 19
 59 <212> TYPE: DNA
 60 <213> ORGANISM: Artificial Sequence
 62 <220> FEATURE:
 63 <223> OTHER INFORMATION: Primer
 65 <400> SEQUENCE: 4
 66 gtccagagat ggccatagc                               19
 68 <210> SEQ ID NO: 5
 69 <211> LENGTH: 18
 70 <212> TYPE: DNA
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ENTERED

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 71 <213> ORGANISM: Artificial Sequence
 73 <220> FEATURE:
 74 <223> OTHER INFORMATION: Primer
 76 <400> SEQUENCE: 5
 77 ccaggatagg cctcgctg                                          18
 79 <210> SEQ ID NO: 6
 80 <211> LENGTH: 23
 81 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial Sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: Primer
 87 <400> SEQUENCE: 6
 88 tacagttttt cttgtgaaga ttg                                    23
 90 <210> SEQ ID NO: 7
 91 <211> LENGTH: 19
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Artificial Sequence
 95 <220> FEATURE:
 96 <223> OTHER INFORMATION: Primer
 98 <400> SEQUENCE: 7
 99 gggtagtccc caccttttg                                         19
101 <210> SEQ ID NO: 8
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Primer
109 <400> SEQUENCE: 8
110 tccaagtcct ggcatctcac                                        20
112 <210> SEQ ID NO: 9
113 <211> LENGTH: 184
114 <212> TYPE: DNA
115 <213> ORGANISM: Homo sapiens
117 <220> FEATURE:
118 <221> NAME/KEY: misc_feature
119 <222> LOCATION: (1)...(184)
120 <223> OTHER INFORMATION: n = A,T,C or G
122 <400> SEQUENCE: 9
123 ataagcagat aatgcctggn catgcaanct tannaccgna ctgntgtttg caagctgnnt 60
124 aagtgagcaa atcttgggaa gatttcaagc acaccaacat ggcacatgta tacatatgta 120
125 acaaacctgc acattgtgca catgtaccct aaaacttaaa gtgtaacaat aataaaattt 180
126 tttt                                                        184
128 <210> SEQ ID NO: 10
129 <211> LENGTH: 309
130 <212> TYPE: DNA
131 <213> ORGANISM: Homo sapiens
133 <400> SEQUENCE: 10
134 ggaagctttc acaccacatt ttgtttcctg acaagagaag gagaaatcgt tggcctctgc 60
135 gtgacatgga gggtcccccc acctgcaagc ttttgtgttt gctggatctt ggacagtacc 120
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    136 ctggcgaaaa gcattcggca agattatccg gctagcacag ccttcaagga ataaatatct 180
    137 aacaccttgt tccctttgcg gttcaaaagc cactgtcact ggggtacata ggcagtttta 240
    138 aaaaaggcta caattcatat gcaaactaga ggaggatttc catgatttca taataaaatg 300
    139 ttgaaacgc                                                         309
    141 <210> SEQ ID NO: 11
    142 <211> LENGTH: 143
    143 <212> TYPE: DNA
    144 <213> ORGANISM: Homo sapiens
    146 <220> FEATURE:
    147 <221> NAME/KEY: misc_feature
    148 <222> LOCATION: (1)...(143)
    149 <223> OTHER INFORMATION: n = A,T,C or G
    151 <400> SEQUENCE: 11
    152 gtggccatgt acttggctta aagttaagga ttctactact gtngaagang gagagaacgg 60
    153 nttctagagg acaactggca gtctccttgt agctgagact tttttgtgta taaaaattaa 120
    154 taaaattggt ttattaattt gtt                                         143
    156 <210> SEQ ID NO: 12
    157 <211> LENGTH: 210
    158 <212> TYPE: DNA
    159 <213> ORGANISM: Homo sapiens
    161 <400> SEQUENCE: 12
    162 atctatgcag attagctctc tgcccttcct ttaataactg gactcttgga gcatctgatt 60
    163 gacagagatg ggggtttcgc catgttgccc aggctggtct caagctcctg aactcaagtg 120
    164 atcttcccac ctaagcctcc caaagtgctg ggattacagg catgagccac gactcccagc 180
    165 ctgaaatata gattttaatc ttcagcttgc                                  210
    167 <210> SEQ ID NO: 13
    168 <211> LENGTH: 453
    169 <212> TYPE: DNA
    170 <213> ORGANISM: Homo sapiens
    172 <220> FEATURE:
    173 <221> NAME/KEY: misc_feature
    174 <222> LOCATION: (1)...(453)
    175 <223> OTHER INFORMATION: n = A,T,C or G
    177 <400> SEQUENCE: 13
    178 gtatacatcc agatggccgg aagcaactga agatccacaa aagaagtgaa aatagccgta 60
    179 actgatgaca ttccaccatt gtgatttgtt tctgccccac cgtaactgat caatgtactt 120
    180 tgtaatctcc cccacccta agaaggttct ttgtaatctc ccccacccтt aagaatgttc 180
    181 tttgtaattc tccccaccct tgagaatgta ctttgtgaga tctacccct gcccacaaaa 240
    182 cattggtcct gactccaccg cctatcccaa aacctataag aactaatgat aatcccacca 300
    183 cccttttgctg actctctttt cggactcagc ccgcctgcac ccaggtgaaa taaacagcct 360
    184 tgttgctcac aaaaataaaa aaaaaggcca gcgaggccaa ttcagcttgg acttaaccag 420
    185 gctngacctt ggtnnaaaag gggggctccc ccc                              453
    187 <210> SEQ ID NO: 14
    188 <211> LENGTH: 344
    189 <212> TYPE: DNA
    190 <213> ORGANISM: Homo sapiens
    192 <400> SEQUENCE: 14
    193 tgcctccaga aagaacgcag ccctactgac accttggttt tggcctggtg agaccaactt 60
    194 tggacttttc acttccaaaa ctaatttcgc tcttgttgcc caggctggag tgcaatgacg 120
```

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```
195 agatcttggc tcactgcaac ctccacctcc caggtttaag tgattctcct gcctcagcct 180
196 cccaagtagc tgggattaca ggaagaaaaa tggaactaaa aagggaaaac aatagcaaca 240
197 aagatcaaaa taaataacaa ggaagcggag agaagaaaga acatggtgaa gagagtgaaa 300
198 agcattgtca tttggggtga attgcagaaa gaaataaatt attg            344
200 <210> SEQ ID NO: 15
201 <211> LENGTH: 473
202 <212> TYPE: DNA
203 <213> ORGANISM: Homo sapiens
205 <220> FEATURE:
206 <221> NAME/KEY: misc_feature
207 <222> LOCATION: (1)...(473)
208 <223> OTHER INFORMATION: n = A,T,C or G
210 <400> SEQUENCE: 15
211 atgcttcctg ggaagctccc aggagcccaa cctaagaaga ggggaaggcc cagaggagcc 60
212 aggagcgaga tctttgacac tacctgcttc cccacctgct gctgccttgt ctgggctgga 120
213 gctgtgctaa gagcagttct aggacagatg aggagacaac tgttctgccc ggggctaagg 180
214 actgaaccct ccaggtctac atttctcttt gccatactgc tctgggctct gggggttgac 240
215 ctgaatggac cacacagcca tggtgtctcc tgtcctccac cttcactggt gaagactggg 300
216 agtgaggaag aagagtgaga ttgcaccctc tctgcaggac catgggcaga ccctgcccct 360
217 tacctcttct caggggtctc tcttctctcc tattaacttc tttccatttc cctnattaag 420
218 ccctttgntt tggttttttg gganattgcc ggccnncacc ttttggaaaa ttg        473
220 <210> SEQ ID NO: 16
221 <211> LENGTH: 403
222 <212> TYPE: DNA
223 <213> ORGANISM: Homo sapiens
225 <400> SEQUENCE: 16
226 gagtctactg acagaagcca aaggttgctg ctagtttcag cttcctggtg ttcctcatta 60
227 ttttcaaaaa tgtctgactg catcttttgg acattataaa aaccacagta ggaaaaaacg 120
228 ccagctattt caatggacca acaaagtgag actccaaagt gagccaagaa gtcctcaaag 180
229 cccttcctaa aggatggagg aacacatgaa tatatacatc aaatcctcct tccacagaga 240
230 ctcactgaag ggaatgaaga agggaaaagt cctcctaatt attaagatgc gttccttggg 300
231 actcggagaa ttaggaagga aacccccaag tcttgaatac atttctctaa agaggccgaa 360
232 tacttaataa tcaggggaga ttaaagcaaa tgggagaccc ctt               403
234 <210> SEQ ID NO: 17
235 <211> LENGTH: 445
236 <212> TYPE: DNA
237 <213> ORGANISM: Homo sapiens
239 <220> FEATURE:
240 <221> NAME/KEY: misc_feature
241 <222> LOCATION: (1)...(445)
242 <223> OTHER INFORMATION: n = A,T,C or G
244 <400> SEQUENCE: 17
245 agacggggt ctcactacgt tgcccaggct gatcttgaac tcctgcctca aatgaccctc 60
246 ctgcctcagc ctcccaaagt gctgcgatta aaggcacaag ccactgtgcc caaccaaagg 120
247 gtcttgctct gtcgcccagg ctagagtgca gtggcgcaat cttggctcat ggcaacctcc 180
248 acctcccggg ttcaagcgat tctcctgcca cagcctcccg agtagctggg attacaggtg 240
249 cctaccacca ggcccagcta aattttttg tatttttagt acagacgggg tttcgccacc 300
250 ttggccaggc tggtcttgaa ctcctgacct tgtgatctac ccacctnagn ntcccaangg 360
251 gctggnatta cagggggag agaccggacc cagccacctt actgngtttc tgantgnnnt 420
```

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    252 ttcctttcct ttccttttcc cttaa                            445
    254 <210> SEQ ID NO: 18
    255 <211> LENGTH: 486
    256 <212> TYPE: DNA
    257 <213> ORGANISM: Homo sapiens
    259 <220> FEATURE:
    260 <221> NAME/KEY: misc_feature
    261 <222> LOCATION: (1)...(486)
    262 <223> OTHER INFORMATION: n = A,T,C or G
    264 <400> SEQUENCE: 18
    265 agacggggt ctcactacgt tgcccaggct gatcttgaac tcctgcctca aatgaccctc 60
    266 ctgcctcagc ctcccaaagt gctgcgatta aaggcacaag ccactgtgcc caaccaaagg 120
    267 gtcttgctct gtcgcccagg ctagagtgca gtggcgcaat cttggctcat ggcaacctcc 180
    268 acctcccggg ttcaagcgat tctcctgcca cagcctcccg agtagctggg attacaggtg 240
    269 cctaccacca ggcccagcta atttttttgt atttttagta cagacggggt ttcgccacct 300
    270 tggccaggct ggtcttgaac tcctgacctt gtgatctacc cacctcagtc tcccaaagtg 360
    271 ctgggattac aggtgtgaga gaccgcaccc aggcacctta ctgaggttct gaatgntctt 420
    272 ttcnttcttt ttccttttc ccttaaattg gcccaaagtt tnatccttgg ctttttttac 480
    273 tggcta                                                   486
    275 <210> SEQ ID NO: 19
    276 <211> LENGTH: 443
    277 <212> TYPE: DNA
    278 <213> ORGANISM: Homo sapiens
    280 <220> FEATURE:
    281 <221> NAME/KEY: misc_feature
    282 <222> LOCATION: (1)...(443)
    283 <223> OTHER INFORMATION: n = A,T,C or G
    285 <400> SEQUENCE: 19
    286 ngnngaggaa nngtgnctga gnncntgctn gaancnnatg ntgngacnct nnctgtgtna 60
    287 nntgcggaac ttagaaacag agnttcacca tgttggccaa gatggnctng atntcctgac 120
    288 ctcgtgatcc gcccacctca gcctcccaaa gtgctgggat tacaggcacg aaccactgcg 180
    289 cccggcccaa aatgaaagga gccccaggcc tctcaaaaag tatgaaagaa ctggaattca 240
    290 ccagatcatc acatccagac aatgagacac caggcccctc attcatcatg atggcttctt 300
    291 tacccctatg gagttcctgt tttcccttag atagttacat ttcttccctg ctatataaac 360
    292 ccctaatttt aagtcaatcc cgaagacgga tttgagcttc aagcttccat cttctttggc 420
    293 tgnagaacct ggttaaaggc ctt                                 443
    295 <210> SEQ ID NO: 20
    296 <211> LENGTH: 360
    297 <212> TYPE: DNA
    298 <213> ORGANISM: Homo sapiens
    300 <220> FEATURE: ·
    301 <221> NAME/KEY: misc_feature
    302 <222> LOCATION: (1)...(360)
    303 <223> OTHER INFORMATION: n = A,T,C or G
    305 <400> SEQUENCE: 20
    306 ggtttcgctc tgttgcccag gctggagcgc agcggcatga tctcggctca ctgcaacctc 60
    307 cacctcccgt gttcaagtga ttcttctgcc tcagccacca aggcgggcgt cccaaagtgc 120
    308 tgggattaca ggtgtgagcc actgcacctg gcttagaaat cttttcattc tttcaacatg 180
    309 aatcctgctc ttagaatcac agagtacaaa gcttcctggt acaggtgggg aaactgaggc 240
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.

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Input Set : A:\8535-029.txt
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L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:477 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
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L:574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:575 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36